MODEL BASED DETECTION AND COMPENSATION OF GLITCHES IN COLOR MEASUREMENT SYSTEMS

ABSTRACT OF THE DISCLOSURE

A color sensor monitors the output of a color producing process and produces a signal representative of a color produced by the color producing process. The signal can be used as feedback signal to control the process. Occasionally, the color sensor signal includes a component representing a transient error. A system model of the color producing process is used to predict reasonable sensor signals. A comparison of the sensor signal with the predicted sensor signals is used to determine if the sensor signal is reasonable. If the sensor signal is unreasonable, a substitute signal is used as the feedback signal to the control process. The substitute signal can be a predicted sensor signal or a signal based on historical system performance data.